

Department of Public Works Infrastructure Services Division



2013 Capital Budget Transportation and Operations

City of Milwaukee, Transportation & Operations

2013 Requested Bridge Program

	State & Fed	Local	TOTAL
Year	(Millions)	(Millions)	(Millions)
2013	\$5.75	\$9.79	\$15.54
2014	\$5.85	\$9.82	\$15.67
2015	\$3.40	\$9.60	\$13.00
2016	\$3.50	\$9.53	\$13.03
2017	\$3.50	\$9.60	\$13.10
2018	\$3.50	\$9.50	\$13.00
6 Yr Total	\$25.50	\$57.84	\$83.34

City Bridge Inventory

- 176 City-owned and maintained bridges
- Relative comparison of bridge types:



Bridge State & Federal Program

- Available for bridges deemed as federally eligible
- Competitive application process for limited WisDOT state-wide Bridge Program dollars
- Application on 3 year cycle through County government
- Usual 80% Federal/State funded with 20% local share
- WisDOT Bridge Program funding has been substantially reduced in recent years



WisDOT Bridge Program - City Allocations

- 2005-07 \$3,267,590
- 2007-09 \$8,891,200
- 2009-12 \$12,696,000

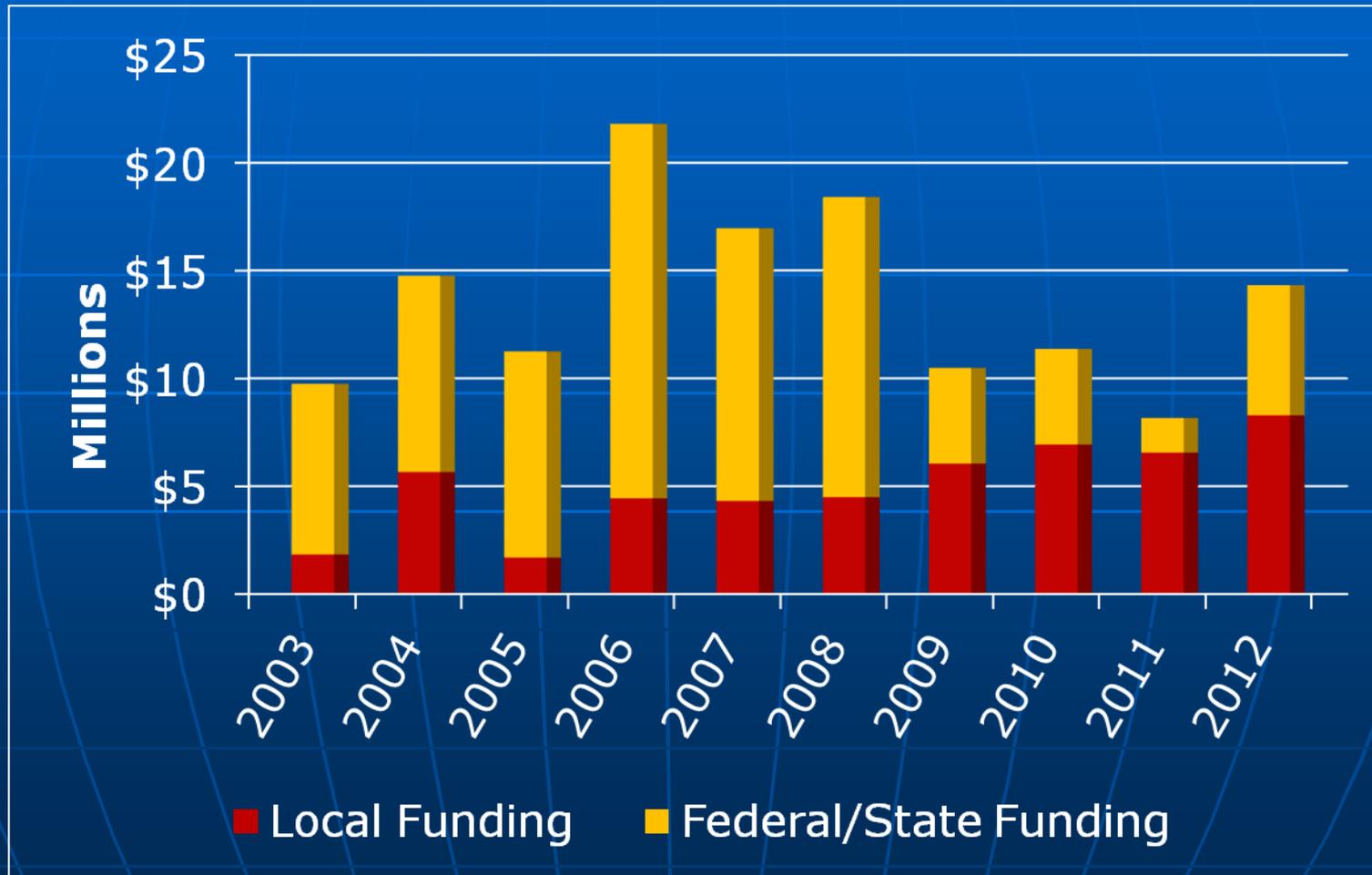
Average = ~\$3.5M per year since 2005

- 2012-14 \$1,223,000

Average = ~\$0.6M per year

- Result = Major bridge improvements have shifted to City Local funded program

Summary of Capital Bridge Program 2003-12



2013 Bridge State & Federal (\$5,755,000)

- Additional funding for various 2012 projects \$2,170,000*
- Miscellaneous bridge projects \$2,160,000
- N. 45th Street over Menomonee River- rehab (SR 46.5) \$1,005,000
- S. 27th St Culvert over KK River - rehab (SR 67.0) \$420,000**

* Capitol Drive, Whitnall Ave. and S. 27th Street Bridge

** 100% funded with STP funds

Bridge Local Program

- Bridges not deemed Federal/State eligible
- Bridges in which Federal/State funds not available or insufficient
- Maintenance work including structure repair, painting mechanical upgrades, inspections, pre-engineering activities, etc.
- Bridge Safety inspections



2013 Bridge Local (\$9,785,000)

- W. St Paul Ave over Milwaukee River - rehab (SR 45.5) \$9,000,000
- W. Becher St. Ave over Kinnickinnic River – design \$300,000
- Underwater Dive Inspection of Scour Critical Bridges \$175,000
- City Safety Bridge Inspection \$150,000
- Misc various projects \$150,000
- S. 5th St over Kinnickinnic River – MMSD review \$10,000



2013 Requested Sidewalk Program (\$1,600,000)

Year	(Millions)
2013	\$1.6
2014	\$1.7
2015	\$1.8
2016	\$1.9
2017	\$2.0
2018	\$2.1
6 Yr Total	\$11.1

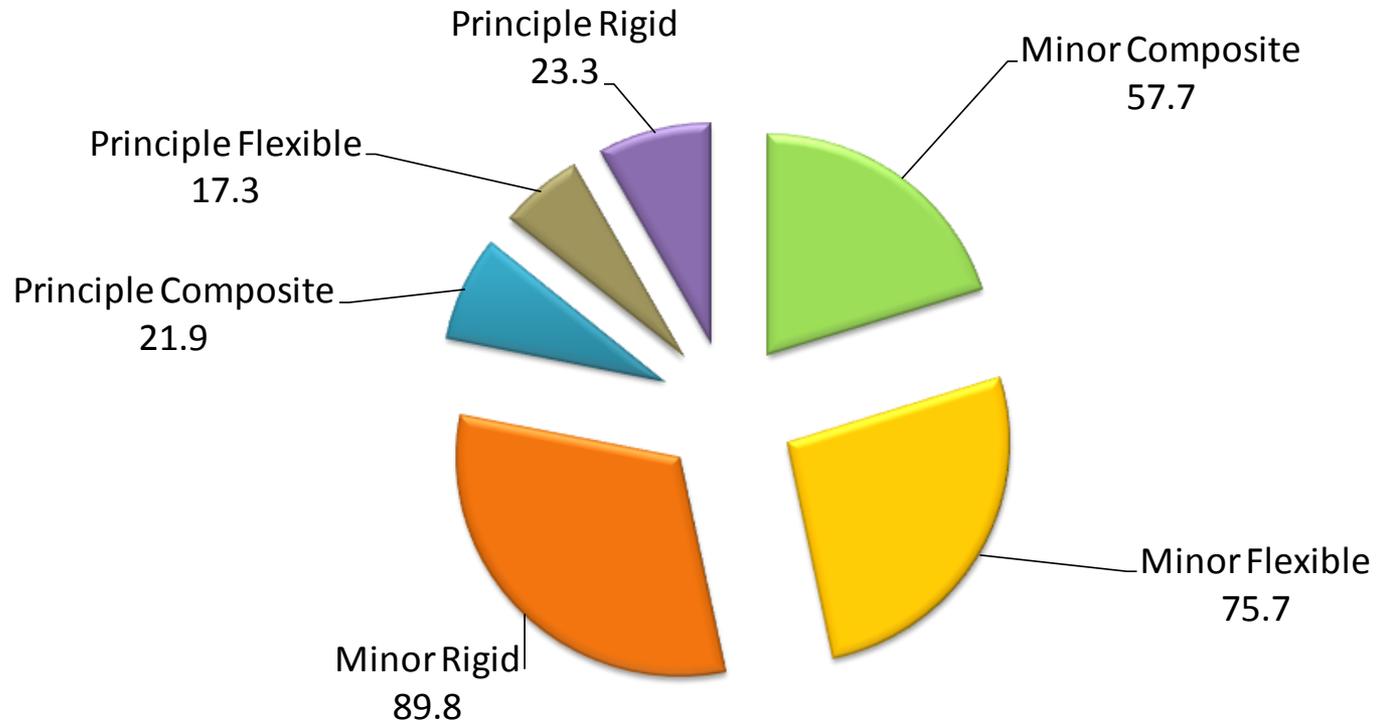
- Area wide \$1,300,000
- Scattered site \$300,000



2013 Requested Major Street Program

Year	(Millions)
2013	\$56.726
2014	\$22.051
2015	\$55.291
2016	\$34.358
2017	\$39.106
2018	\$50.745
6 Yr Total	\$258.277

City Major Street Inventory



2013 Major Street Program (\$56,726,000)

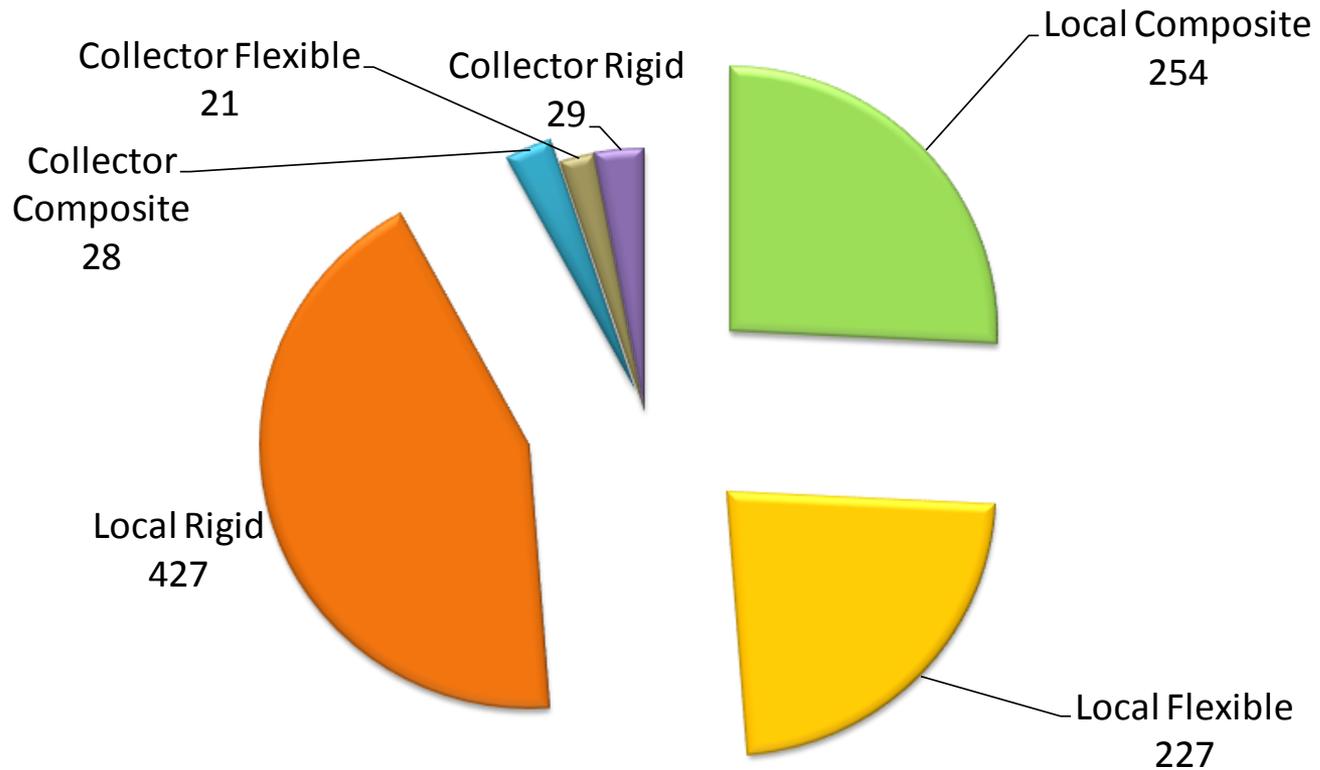
- State Trunk Highways \$32,177,000
- County Trunk Highways \$ 255,000
- State Transportation Program \$ 4,220,000
- Other (CH,TE, CMAQ, LRIP, SRTS, etc.) \$20,074,000



2013 Requested Local Street Program

Year	(Millions)
2013	\$16.0
2014	\$15.0
2015	\$17.0
2016	\$15.6
2017	\$18.0
2018	\$16.3
6 Yr Total	\$97.9

City Local Street Inventory



2013 Requested Alley, New Street and Developer Programs

	Alley	New Street	Developer
Year	Millions	Millions	Millions
2013	\$3.0	\$0.30	\$0.4
2014	\$3.5	\$0.35	\$0.4
2015	\$3.5	\$0.35	\$0.4
2016	\$3.5	\$0.35	\$0.4
2017	\$3.5	\$0.35	\$0.4
2018	\$3.5	\$0.35	\$0.4
6 Yr Total	\$20.5	\$2.05	\$2.4

2013 Requested Street Lighting and Traffic Control Programs

	Street Lighting	Traffic Control
Year	Millions	Millions
2013	\$9.7	\$2.59
2014	\$10.05	\$2.65
2015	\$10.20	\$2.88
2016	\$10.20	\$2.82
2017	\$9.80	\$2.80
2018	\$10.30	\$2.85
6 Yr Total	\$60.25	\$16.58

2013 Street Lighting Program (\$9,700,000)

- Engineering \$ 1,100,000
- Street Lighting Substations \$ 1,350,000
- Neighborhood Lighting Program \$ 2,750,000
- Paving Program \$ 4,500,000



2013 Traffic Control Program (\$2,590,000)

- Engineering \$ 340,000
- Signals \$ 875,000
- Signs \$1,185,000
- Uncollectable Knockdowns \$ 190,000



2013 Requested New Conduit and MH Repair Programs

	New Conduit	MH Repair
Year	Millions	Millions
2013	\$5.0	\$1.0
2014	\$5.0	\$1.0
2015	\$5.0	\$1.0
2016	\$5.0	\$1.0
2017	\$5.0	\$1.0
2018	\$5.0	\$1.0
6 Yr Total	\$30.0	\$6.0

Types of Conduit Systems

1. Communications: This system provides a path for communications, traffic control and telecommunications and, cable TV cables.

- Utilized by various City Agencies: DCD, DPW, Fire, Police, Health, Traffic Control.
- Excess capacity leased to Telecommunications and Cable TV companies.

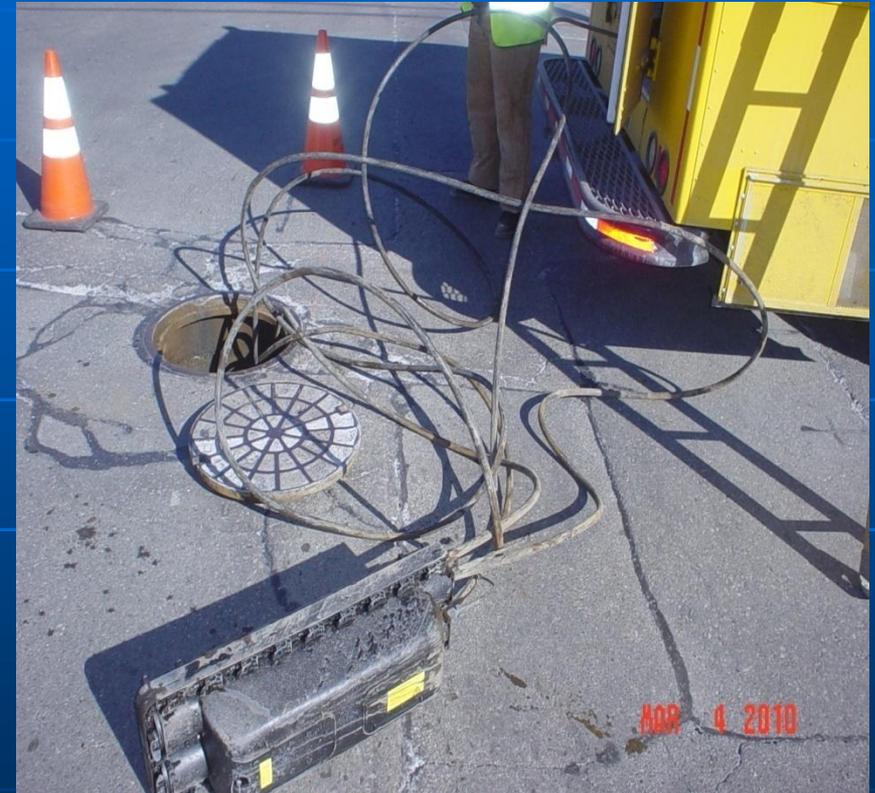
2. Electrical: This system provides a path for traffic control and street lighting cables.

(Communication cables must remain separate from the higher voltage electrical cables)

Conduit Installations

- Conduit systems are relocated/replaced due to paving conflicts/geometric changes
- Conduit projects are based on prioritized requests received from Communications and Traffic Engineering for new conduit paths as well as to increase capacity.
- Conduit is installed in conjunction with State, County, and local paving projects whenever possible to save on construction costs and cost sharing opportunities on DOT Connecting Highway projects.
 - 2013 Conduit projects in advance of the Zoo Interchange Project
- 2013 Requested Budget \$5 Million Conduit Installations

Communications Manhole – Splice Case



Block Manhole Repair



Manhole Inventory

7,543 Active communications and electrical manholes

- 43% (3,200) Brick Manholes (1888-1950)
- 40% (3,000) Block Manholes (1950-1980)*
- 17% (1,300) Precast Manholes (1980-Present)

*Block Manholes fail at a faster rate; no reinforcement

Identify which brick and block manholes need to be replaced or repaired.

Manhole Inspection Program

- Baseline condition report for all manholes
 - conduct inspections over 5 years; at 1,500 MH/yr
- 5-10 year re-inspection cycle

Manhole Inventory

Manhole Replacement / Repair Program

- 3,200 brick manholes either need replacing or repairing, average replacement cost \$23,500 per MH, average repair cost \$4,700 per MH
- All replaced: $3,200 \text{ MH} \times \$23,500 = \$75.2 \text{ Million}$
- All repairs: $3,200 \text{ MH} \times \$4,700 = \$15 \text{ Million}$

2013 Requested Budget (\$1,000,000)

\$150,000 Manhole Inspection Program

\$850,000 Manhole Replacement / Repair Program